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ABSTRACT

This continuing education curriculum and related materials are designed to provide library professionals with a general orientation to the issues and process of negotiating and successfully securing an automation contract. The course syllabus includes the following topics: (1) definition and objectives of a contract; (2) why vendors typically have the negotiations advantage; (3) why the buyer should negotiate; (4) the principled negotiation method; (5) classic vendor techniques (ploys) to undermine negotiation; (6) performance examinations for functions, reliability, data load, full load response time, and storage capacity; and (7) remedies for vendor non-performance. Both good and poor examples are then provided of contractual language used to specify the terms of theoretical contracts. Some of the areas covered by this language include equipment; software; maintenance; patents, copyrights, and proprietary rights; ownership of data and index files; effects of regulation; insurance; warranties; arbitration; payment; software licenses; installation; limitation of liability; and schedules. Language spelling out the specifications for each of six performance examinations is also provided. (CGD)

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PREPARING CONTRACTS AND NEGOTIATING WITH LIBRARY AUTOMATION VENDORS

PRESENTED BY

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DECEMBER 1988

Special Notice

This continuing education curriculum and related materials are designed to provide library professionals with a general orientation to the issues and process of negotiating and successfully securing an automation contract.

The course is offered with the understanding that neither the author nor course sponsors are engaged in rendering legal advice. Participants are encouraged to seek the services of a qualified attorney before taking any legal action or preparing any legal documents.

Recommended Readings

Auer, Joseph and Harris, Charles Edison. Computer Contract Negotiations. New York: Van Nostrand Reinhold Company, Inc. 1981. ISBN: 0-442-20369-1.

Brandon, Dick H., and Segelstein, Sidney. Data Processing Contracts: Structure, Contents, and Negotiation. New York: Van Nostrand Reinhold Company, Inc. ISBN: 0-442-21034-5.

Cortez, Edwin M. Proposals and Contracts for Library Automation: Guidelines for Preparing RFPs. Studio City, CA: Pacific Information, Inc. 1987. ISBN: 0-913203-17-3.

Davis, Lanny J., Allen, Don A., Bowman, Terry, and Armstrong, Joseph. A User's Guide to Computer Contracting: Forms, Techniques and Strategies. Clifton, NJ: Harcourt Brace Jovanovich. ISBN: 0-15-004368-6.

Fisher, Roger, and Ury, William. Getting to YES: Negotiating Agreement Without Giving In. Boston, MA: Houghton Mifflin Company. 1981. ISBN: 0-395-31757-6.

Sparks, Donald B. The Dynamics of Effective Negotiation. Houston: Gulf Publishing Company, 1986. ISBN: 0-87201-582-3.

THE CONTRACT: DEFINITION AND OBJECTIVES

What is a 'Contract' or 'Agreement':

- Contract is an agreement or understanding that is 'legally enforceable'
- Issues which are not enforceable
  - √ Blatant illegalities [bribes, collusion]
  - √ Penalties "...the law abhors a penalty..."
  - √ Violation of public policy or regulation [personal promises/marriage]
  - √ Statutory violations [fraud]
  - √ Unconscionable agreements [rare for commercial transactions]
    - (a) Glovatorium v. NCR [Buyer won]
    - (b) Loveright Diamond v. Nixdorf Computers [Buyer lost/consultant]

Objectives of a good Agreement:

- Clear documentation of the relationship of each party
- Clear definition of the rights and responsibilities of each party
- Detail a clear and technical legal description of the purpose and focus of the Agreement
- Establish clear definition of deliverables
- Establish clear procedures and quantitative measures of successful performance
- Define circumstances where a party is in default of defined obligations
- Define remedies and corrective measures for default situations
- Provide all available legal protections to the Buyer's institution against catastrophic situations or disasters

Importance of Establishing a Comprehensive & Complete Contract

'Parol Evidence Rule':

Court established precedent of limiting the relationship to the formal contract, keeping oral testimony to an absolute minimum

- Avoids conflicting oral testimony
- 'Final expression' - in conflicts between oral agreements and written contract, contract will prevail as final expression
- Oral arguments are strongest only if contract is silent on the area of conflict

'Reasonableness':

Defined by industry practice and common usage

- Courts determine reasonableness based on expert oral testimony
- Usually to advantage of Vendor, since what may be 'reasonable', may be unfair to Buyer on a given contract
- May default to general provisions presented in U.C.C.

'Implied Warranties':

Rare or nonexistent in computer industry

- Implied Warranty of Merchantability [pass without objection in the trade]
- Implied Warranty of Fitness for a Particular Purpose

WHY VENDORS TYPICALLY HAVE THE NEGOTIATIONS ADVANTAGE

Vendors have more experience in contracts and negotiations:

- Vendor has experienced and specially skilled negotiators
- Buyer has little or no experience; weak in both the process and perhaps the content areas of the contract.

Vendor representatives are trained in the "3 R's" to exploit in dealing with sales accounts:

- Rapport -- Rationale -- Relationship
- Buyer wants to have a long and warm relationship, not start the relationship with a conflict interaction

Buyers are usually in a period of emotional anticipation,captured in the spheres of high expectation and

- Captured in high expectation of application of the new technology
- Buyer is anxious; bored with planning and procurement
- Buyer experience with vendor, to date, has been reasonably good and confidence is high - hence the selection of that vendor

Timing tends to work against the Buyer:

- Vendors have more flexibility with the time necessary to complete the relationship
- Buyers have schedules in place; may already be behind schedule
- Whatever benefits may result do not seem worth the time, risk, cost and hassle

Vendors have an information advantage:

- RFP/ITB procurement process exposes much of library
- 'Hot buttons' usually known to vendor
- Vendors may have knowledge of other vendor proposals

Most Buyers put little emphasis on the contract phase:

- Most staff effort is focused on planning, budgeting, and proposal evaluation
- Few Buyers hire professional negotiators or attorneys for contract negotiations

WHY SHOULD THE BUYER 'NEGOTIATE' ?

Negotiations usually result a superior contract for the Buyer"

- Potential initial or long term financial savings or containment
- Superior payment terms
- Superior performance guarantees
- Better definition of business relationship between Buyer/Vendor

Negotiations lessen the dependence on 'rapport' or 'relationship':

- Establishes a better 'business-like' relationship
- Better defines realistic expectations about the responsibilities of both parties

Clear definition of 'deliverables'

Negotiations often results in an improved 'respect' of the Vendor of the Buyer

Negotiations provides the best forum to minimize and equalize the risk and issues necessary for a successful system implementation and operation

DON'T BARGIN OVER 'POSITIONS':

What is a 'Position' and why is this important ?

'Position' Bargaining...

- ... results in unwise agreements
- ... endangers the ongoing relationship
- ... cannot be successful when there are multiple parties involved
- ... being 'nice' is unsuccessful

What is the alternative ?

'Principled Negotiation Method': Negotiation based on the merits

SOURCE: Fisher & Ury, Getting to YES

PRINCIPLED NEGOTIATION METHOD

People: Separate the people from the problem

- ... negotiators are people - separate substance from people
- ... recognize and control the power of perception
- ... recognize and control the power of emotion
- ... communicate effectively

Interests: Focus on interests and not the positions

- ... reconcile interests and not positions
- ... identify interests
- ... communicate interest issues without conflict; hard on problem, soft on people

Options: Generate a wide variety of options and possibilities before securing a position.

- ... diagnosis is key to successful alternatives
- ... separate inventing options from judging them
- ... broaden options rather than narrow options
- ... search for mutual gains
- ... invent ways to make decisions easier

Criteria: Insist on a result oriented agreement based on an objective standard

- ... avoid decisions on the basis of will power
- ... develop objective standards - emphasize 'fairness'
- ... search for mutual gains

SOURCE: Fisher & Ury, Getting to YES

What if the Opposition is too Powerful...Uncooperative...Negative...

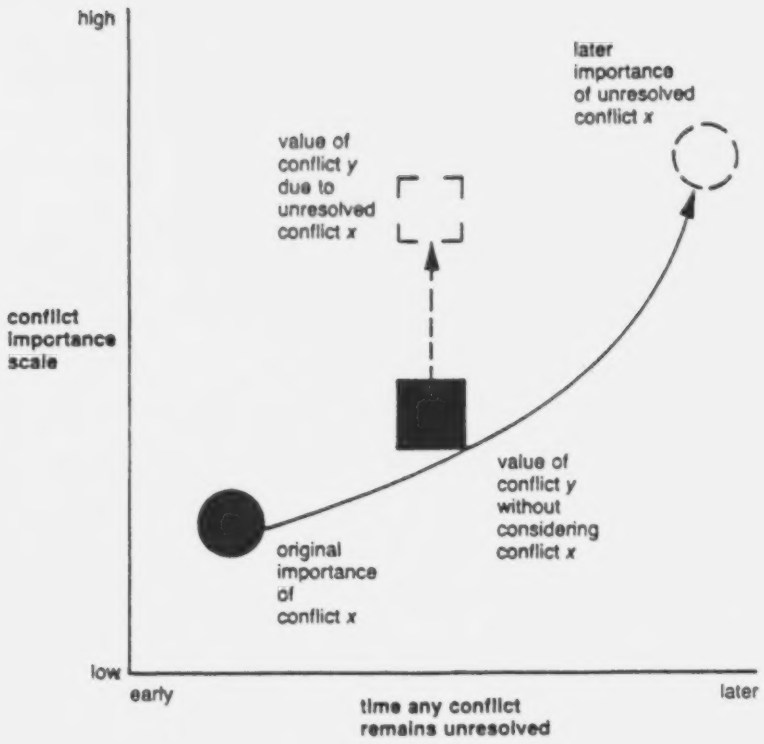
BATNA - Best Alternative to a Negotiated Agreement

Negotiation Jujitsu

What if they use Dirty Tricks -- the 'Taming' Process

SOURCE: Fisher & Ury, Getting to YES

The Effect of Time on the Element of Conflict Importance


high
later importance of unresolved conflict x
value of conflict y due to unresolved conflict x
conflict importance scale
value of conflict y without considering conflict x
original importance of conflict x
low
early
later
time any conflict remains unresolved

SOURCE: E. Berne, Games People Play

CLASSIC VENDOR TECHNIQUES [PLOYS] TO UNDERMINE NEGOTIATIONS

The "Issue of Trust" Argument

- Vendor and Buyer managers and staff change, conditions change, and commitments are interpreted differently
- If it isn't in the formal Agreement, it isn't part of the relationship

The Form Contract Ploy

- Written to provide maximum protection for Vendor; minimum protection for Buyer
- Requires an effort to equalize rights and obligations

The "Precedent Setting" Ploy

- Used as an argument against any type of Buyer request; Vendor wild card argument
- Buyer should test by seek listing or prior 'precedents'
- Buyer should seek "Most Favored Nations" contract protection

The "Price Protection" Argument

- Prices are dropping, not increasing; may lock in higher prices
- Vendors can use this to clear out older stock items
- May result in becoming tied to an older technology

The "Hot Button" Ploy

- Vendor surfaces "hot button" issues when the Buyer holds firm on issues sensitive to the Vendor
- May result in dividing loyalties of the Buyer negotiations team

The "Corporate Approval" Argument

- Used to defer responsibility from Vendor negotiators; allows Vendor to probe Buyer's level of flexibility prior to settling on a position
- Defers critical issues until Buyer is truly committed
- Vendor has more time to prepare rebuttals

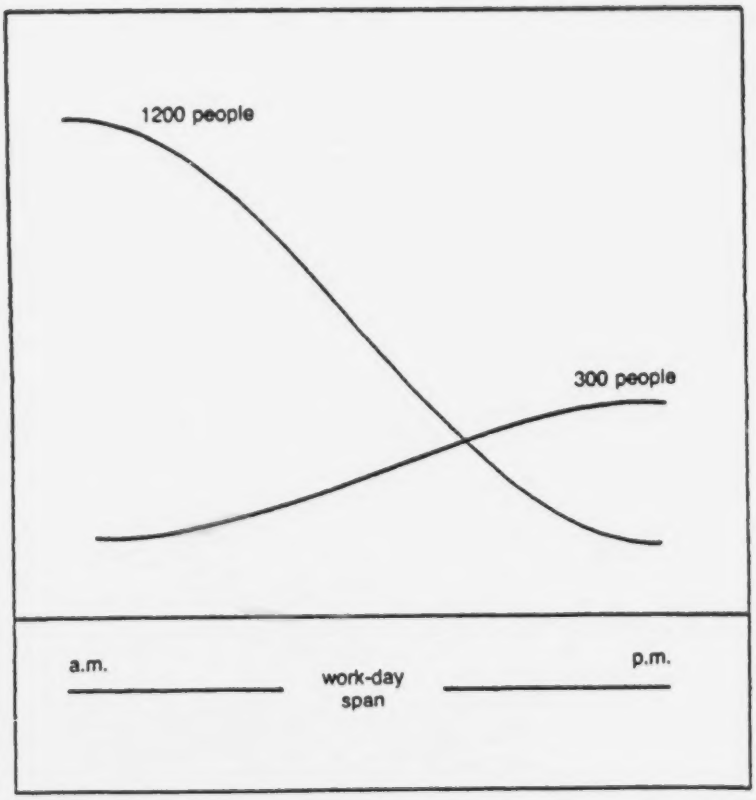
That "Wasn't The Deal" Argument

- Depends largely on the detailed procurement process; binding bids -vs- proposals
- There is not 'deal' until the Agreement establishes the 'deal'

The "State Gov't or GSA" Prohibition Argument

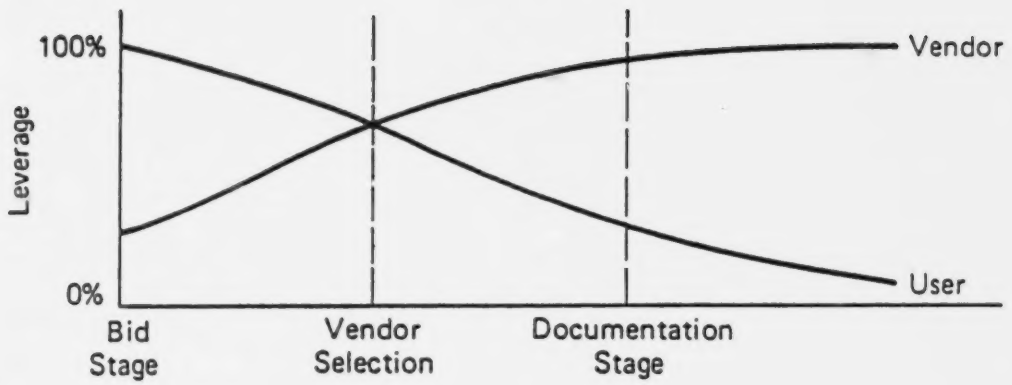
- Shield used to confuse issue; usually a untruthfull argument
- Ignores procedural rules where Vendor can request and receive waiver
- Buyer should seek details and confirm argument

Energy Levels of Individuals Who Negotiate Often



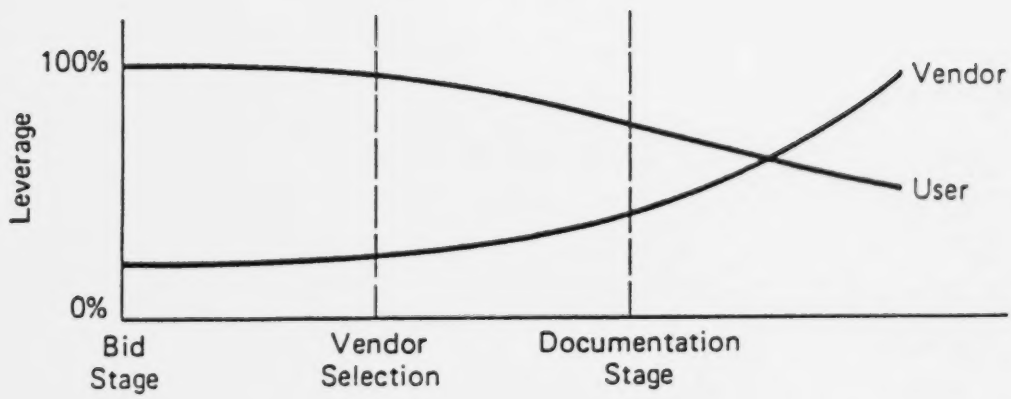
SOURCE: Donald Sparks, The Dynamics of Effective Negotiation

Psychological Negotiating Leverage - - User Urgency



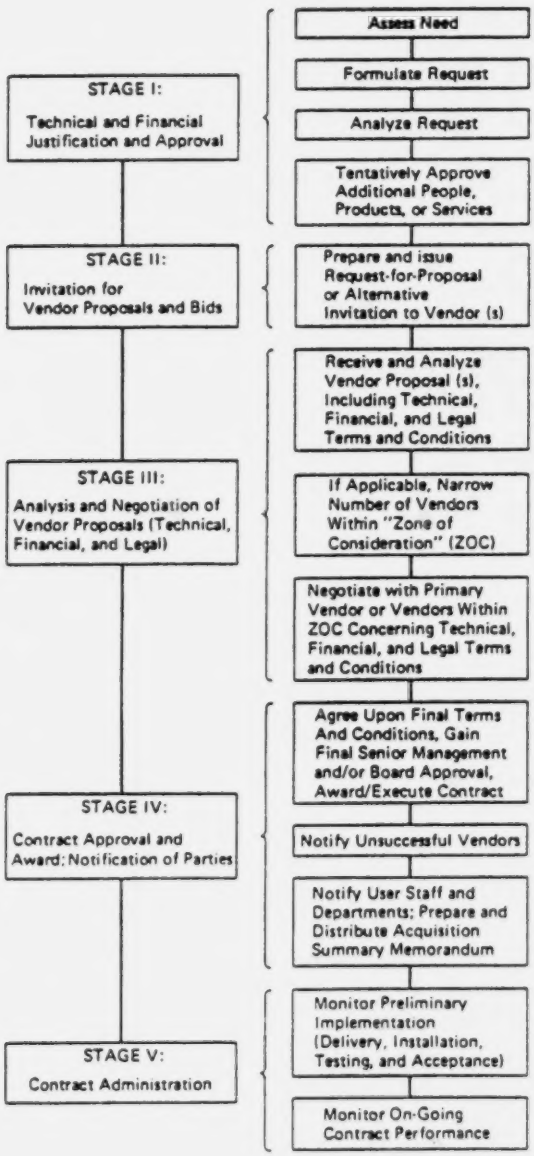
SOURCE: Auer/Harris, Computer Contract Negotiations

Psychological Negotiating Leverage - - Professional Techniques



SOURCE: Auer/Harris, Computer Contract Negotiations

OVERVIEW: Procurement and Contracting Process


STAGE I:
Technical and Financial Justification and Approval
Assess Need
Formulate Request
Analyze Request
Tentatively Approve Additional People, Products, or Services
STAGE II:
Invitation for Vendor Proposals and Bids
Prepare and issue Request-for-Proposal or Alternative Invitation to Vendor (s)
STAGE III:
Analysis and Negotiation of Vendor Proposals (Technical, Financial, and Legal)
Receive and Analyze Vendor Proposal (s), Including Technical, Financial, and Legal Terms and Conditions
If Applicable, Narrow Number of Vendors Within "Zone of Consideration" (ZOC)
Negotiate with Primary Vendor or Vendors Within ZOC Concerning Technical, Financial, and Legal Terms and Conditions
STAGE IV:
Contract Approval and Award; Notification of Parties
Agree Upon Final Terms And Conditions, Gain Final Senior Management and/or Board Approval, Award/Execute Contract
Notify Unsuccessful Vendors
Notify User Staff and Departments; Prepare and Distribute Acquisition Summary Memorandum
STAGE V:
Contract Administration
Monitor Preliminary Implementation (Delivery, Installation, Testing, and Acceptance)
Monitor On-Going Contract Performance

SOURCE: Auer/Harris, Computer Contract Negotiations

PERFORMANCE EXAMINATIONS

Inventory of Performance Examinations

TEST 1: Functional Performance Examination. [Includes search result 'recall/precision evaluation]

TEST 2: Reliability Examination. [Also called 'Availability Examination']

TEST 3 Data Load Examination.

TEST 4 Full Load, Response Time Performance Examination.

TEST 5 Storage Capacity Examination.

TEST 6 Training Program Evaluation. [Optional exam supported by some vendors]

Purpose of Performance Examinations

(1) Initial system acceptance.

(2) Ongoing system performance evaluation.

(3) Fair and consistent method of evaluating System behavior over time.

OBJECTIVES of the Functional Performance Exam

(1) Confirmation that all contractually specified functions are available.

(2) Confirmation that system/user interface features are present.

(3) Confirmation of results for each functional process.

(4) Establish procedures and quantitative criteria for subsequent applications of the test.

(a) Sequential testing of each function in the RFP/vendor response **[PREFERRED]**

- √ Use of transaction scripts
- √ Minimize the use of impromptu transactions
- √ Preparation for testing of functions not initially available [statistical historical counters, etc.]

(b) Monitoring of actual operation conditions **[POOR]**

(c) Monitoring of actual operation conditions with Enhancements **[GOOD]**

(d) Establish method to document non-compliance.

OBJECTIVES of the Reliability Performance Exam

(1) Confirmation of initial reliability of hardware for acceptance.

(2) Confirmation of initial reliability of software for acceptance.

(3) Criteria to measure the acceptability of ongoing reliability of hardware.

(4) Criteria to measure the acceptability of ongoing reliability of software.

(5) Establish procedures and quantitative criteria for subsequent applications of the test.

- (a) Intervals of measurement (monthly, quarterly, annual)
- (b) Formula defining the 'uptime' percentage
- (c) Values or coefficients for each hardware device
- (d) Values or coefficients for each software function.
- (e) Use of spare devices in calculating downtime.

OBJECTIVES of the Data Load Exam

(1) Confirmation of the ability to read and load retrospective bibliographic records.

(2) Confirmation of the ability to read and load [interactively] new bibliographic records.

(3) Confirmation of the proper indexing of the bibliographic records.

(4) Confirmation of the proper loading and linking of item specific records/information.

(5) Establish procedures and quantitative criteria for subsequent applications of the test.

- (a) Use of test records -vs- actual records
- (b) Criteria for evaluating speed of load times
- (c) System activity during record load/index sequence

OBJECTIVES of the Full Load Response Time Exam

(1) Confirmation of adherence to required response times for system acceptance.

(2) Criteria to monitor and measure the acceptability of ongoing system responses.

(3) Establish procedures and quantitative criteria for subsequent applications of the test.

(4) Test administration issues

- (a) Size of databases [what size must be loaded to simulate 'full load']
- (b) Actual -vs- test databases
- (c) Simulated transactions -vs- measurement of operation system activity
- (d) Transaction mix [mix of functions on defined devices]
- (e) Use of transaction scripts [known hit values] -vs- Impromptu transactions
- (f) impact of remote -vs- local terminal activity
- (g) Functions not initially available [blocks, statistical histories, etc.]
- (h) Simultaneous evaluation of individual terminals -vs- multiple terminals
- (i) Simultaneous evaluation of selected transactions -vs- multiple transactions
- (j) Test operator training and experience levels
- (k) Length of testing period(s)
- (l) Average response time -vs- peak response time
- (m) Establish method to document non-compliance.

OBJECTIVES of the Storage Capacity Exam

(1) Confirmation of the ability of the system to support initial loaded/indexed databases.

(2) Definition of MARC indexing specifications

(3) Criteria to monitor and measure planned growth of loaded/indexed databases.

(4) Documentation of required system expansion

(5) Establish procedures and quantitative criteria for subsequent applications of the test.

REMEDIES -- The Issues of vendor non-performance

(1) Minimize the risks of non-performance:

(a) Before system contract is signed

√ Evaluate performance in a 'comparable' site [database, transaction mix, etc.]

√ Perform 'benchmark' tests

(b) Once the system has been contracted, but before the system is paid for.

(2) Once the system has been contracted, but before the system is paid for..

(a) Withhold payment from the vendor

(b) Reject vendor; remove system from library and select different system.

(c) Announce [to professional literature] that system fails to meet acceptance criteria

(3) Once the system has been contracted and paid for..

(a) Liquidated damages

(b) Seek to enforce performance bond against vendor

(c) Litigation [including mediation and/or arbitration]

VENDOR REMEDIES -- Solutions the vendor may suggest

(1) Maintenance discounts in proportion to inadequacies of system performance

(2) Change testing procedures

(3) Change values required to successfully pass the test

(4) Suspend further testing, pending new release of the software

(5) Add additional computing resources to the central computer site

(6) Alter values included as part of indexing system

(7) Reduce size of database engaged during testing procedures

(8) Abandon certain testing standards [which cannot be passed] in favor of alternates[which can be passed]; for example, abandon 'peak load' and rely on 'average load' measurements

(9) Waive selective portions of testing requirements which cannot be passed

Special Notice

*The following examples of contractual language contain a mixture of **good and poor examples** which are designed for discussion purposes. Language contained herein may **not be at all suitable to protect the library** and should not be used without consultation with a qualified attorney.*

Participants are encouraged to seek the services of a qualified attorney before taking any legal action or preparing any legal documents.

Incorporation by Reference.

The Request For Proposals and vendor Proposal documents are incorporated herein by this reference as if set forth in full and shall constitute a part of this Agreement. In the event of a conflict between the obligations of the vendor pursuant to the Agreement and the obligations undertaken by vendor pursuant to either the Proposal or Request For Proposals, this Agreement shall control.

Equipment.

The library agrees to purchase from the vendor the Equipment listed on the Equipment Schedule [collectively called the "Equipment"] upon the conditions and terms set forth in this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Software.

Vendor agrees to grant a license for the user of the computer program and all related documentation listed on the Software Schedule [collectively called the "Software"] upon the terms and conditions set forth in this Agreement. The Equipment and Software are collectively referred to herein as the "system". As used herein, the word "Library" shall mean the _____ Library.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Identification of Parties to the Agreement.

Both the Vendor and Library organizations shall be clearly identified. Neither of the identified parties to the Agreement shall assign or encumber any of its rights, or delegate or subcontract any of its duties defined in the Agreement, in whole or in part, to other third parties unless the other party to the Agreement gives prior written consent. Subject to the foregoing covenant against assignment and delegation, the rights created by the Agreement shall pass to the benefit of the properly identified party and the duties and obligations resulting from the Agreement shall bind the properly identified party and their respective successors and assignees.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Entire Agreement.

This Agreement, including appendices and referenced attachments, constitutes the entire Agreement between Library and Vendor and supercedes all proposals, presentations, representations, and communications, whether oral or in writing, between the parties on this subject.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Agreement Extension and Modification.

The Agreement may be modified or extended in accordance with the following procedures. In the event that all parties to the Agreement agree that such changes would be of a minor and nonmaterial nature, such changes may be effected by a written statement which describes the situation and is signed, prior to the effectiveness, by all parties. In the event that the changes are determined by either or all parties to the Agreement to be of a major or complex nature, then the change shall be by formal amendment of the Agreement signed by the parties and made a permanent part of the Agreement.

Term of the Maintenance Agreement.

The term of the Maintenance Agreement shall be effective from commencement date and shall continue thereafter from year-to-year, and the vendor shall offer equal or better coverage to the library for a minimum of five (5) years. Thereafter, the Maintenance Agreement shall automatically be extended for one (1) year unless either party notifies the other, in writing, that the automatic extension is not desired. At that time, the contract shall expire.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Applicable and Governing Law.

The Agreement shall be subject to all laws of the State of _____. All duties of either party shall be legally performable in _____. The applicable law for any legal disputes arising out of this contract shall be the law of (and all actions hereunder shall be brought in) the State of _____, and the form and venue for such disputes shall be of the appropriate district, county, or justice court, of _____, _____.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Notices.

All notices or communications required or permitted as a part of the Agreement shall be in writing (unless another verifiable medium is expressly authorized) and shall be deemed delivered when:

(a) actually received, or

(b) upon receipt by sender of a certified mail, return receipt signed by an employee or agent of the party, or

(c) if not actually received, 10 days after deposit with the United States Postal Service authorized mail center with proper postage (certified mail, return receipt requested) affixed and addressed to the respective other party at the address set out in the section of the Agreement titles "Identification of the Parties to the Agreement" or such other address as the party may have designated by notice or Agreement amendment to the other party, or

(d) upon delivery by the Library of the notice to an authorized Vendor representative while at the Library site.

Consequences to be born due to failure to receive a notice due to improper notification by the intended receiving party of a new address will be borne by the intended receiving party.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Survival.

All duties and responsibilities of any party, which either expressly or by their nature extend into the future, shall extend beyond and survive the end of the contract term or cancellation of this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Force Majeure Clause.

Timely performance is essential to the successful initial implementation and ongoing operation of the automated Library system. However, neither party will be liable for delays in performing its obligations under this Agreement to the extent that the delay is caused by force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any Government law or regulation, acts of God, acts or omissions of the other party, Government acts or omissions, fires, strikes, national disasters, wars, riots and/or any other cause whatsoever beyond the reasonable control of the parties. Any such cause will extend the performance of the delayed obligation to the extent of the delay so incurred. However, force majeure shall not be allowed unless:

(1) Within three (3) calendar days of the occurrence of force majeure, the party whose performance is delayed thereby shall provide the other party or parties with written notice explaining the cause and extent thereof, as well as a request for a time extension equal to the estimated duration of the force majeure events, and;

(2) Within seven (7) calendar days after the cessation of the force majeure event, the party whose performance was delayed shall provide the other party written notice of the time at which force majeure ceased and a complete explanation of all pertinent events pertaining to the entire force majeure situation.

Unless provided prior written notice of permission by the other party or parties to the Agreement, under no circumstances shall the permissible delays justified by force majeure extend beyond one hundred-twenty (120) days from scheduled dates or from unscheduled deadlines resulting from and established due to failure of the system to meet performance examination(s) as documented in the Agreement. Failure to secure

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

prior written permission extending the due date after the one hundred-twenty (120) days, even under force majeure conditions, shall constitute default by the party failing to meet the required deadline.

Under no circumstances shall delays caused by a force majeure extend beyond one hundred-twenty (120) days from the scheduled delivery or completion date of a task, unless by prior (to the one hundred-twenty (120) days) written notice of permission of the other party. Failure to secure this written prior permission, even in the case of force majeure, shall constitute default by the party failing to meet the requirement.

Either party shall have the right to cancel the contract Agreement if Force Majeure suspends performance of scheduled tasks by one or more parties for a period of one hundred-twenty (120) or more days from the scheduled date of the task. If a cancellation due to a Force Majeure occurs before title passes to the Library, the Vendor may keep any parts of the system as it can salvage, but must remove same at its own expense. If cancellation occurs due to a Force Majeure after title passes to the Library, the system shall remain with the Library and the Vendor shall be entitled to any such payments as have accrued according to the payment schedule.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Site Preparation.

The Library shall, at its own expense, prepare the site(s) to house the computer equipment in accordance with the installation specifications presented in the Vendor proposal or supplied to the Library not less than sixty (60) days prior to the scheduled delivery and installation date for the automated system.

Site preparation shall be completed by the Library no less than ten (10) days prior to the scheduled delivery and installation date for the computer equipment. Upon completion of the site(s), Library shall notify Vendor (by certified mail, return receipt requested) that the site is completed and ready for inspection. Prior to the hardware delivery date, the Vendor shall provide a representative to physically inspect the site and, at the completion of that physical inspection, to provide a written statement of the results of this inspection. Should the library-prepared site be adequate, the Vendor written statement shall indicate that the site has been physically inspected and that the site meets the Vendor specifications for the proper and safe operation of the system.

Should the site be inadequate, the Vendor shall itemize the specific problems and reference the correct requirements from the original site preparation documentation presented to the Library. The Library shall then have sixty (60) days to correct these deficiencies and shall provide written notice (by certified mail, return receipt requested) to Vendor that the site is available for re-examination.
Should the Vendor fail to inspect the site according to the schedules presented in this Agreement, for either the initial inspection or the re-examination, where necessary, the Vendor shall be deemed by this Agreement to have approved site preparations and

any subsequent site changes necessary to install the scheduled system shall be totally the financial responsibility of the Vendor. Any and all changes or modifications to the preparation of the site resulting from inaccurate, incomplete, or erroneous specifications provided by the Vendor which result in added costs for correction or expansion of the site will be the responsibility of the Vendor and will be provided at Vendor expense.

Should the Library fail to correct the deficiencies within the correction period, the Library shall be in default.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Risk During Equipment Storage and Installation.

Delivery shall be made in accordance with the implementation schedule referenced as part of this Agreement. It will be possible to allow for minor variances from this implementation schedule as mutually agreed upon by both parties and confirmed by prior written notice. The computer equipment and computer software shall be installed and placed into good working order by representatives of the Vendor. During the time period where the equipment is in transit and until the equipment is fully installed in good working order, the Vendor and its insurer shall be responsible for the equipment and relieve the Library of responsibility for all risk or loss or damage to the equipment. In addition, Vendor shall hold the Library harmless from any risk of loss or damage arising out of occurrences during the installation of the equipment. Recognizing that all equipment may not arrive in the same shipment, Library agrees to place the crated and packaged equipment in a secure, locked storage area pending installation by the Vendor.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Shipping of Equipment.

All shipping and insurance costs to and from the site shall be included in the vendor's proposal to the Library. All payments to shipping agents and for insurance fees shall be made directly by the Vendor and the Library shall make no payments to any firm concerning the shipment, installation and delivery of equipment which is not a part of this Agreement. Vendor shall invoice Library for all shipment, installation, and delivery charges (which shall not exceed $_____), and Library shall reimburse Vendor within 30-days after receipt of the invoice.

Vendor shall be responsible for all arrangements for the shipment of equipment to the Library and movement of the equipment from the Library protective storage area to the prepared computer site. Recognizing that the Library staff have no prior experience or training in computer technology, the Vendor shall provide all properly trained representatives to unpack all items of equipment and place this equipment in the proper locations. The Vendor shall also be responsible for removal of all debris and packing materials from the Library site resulting from the installation of the equipment or the software/documentation. The Library, at its option, may require the Vendor to provide certificates describing, to the satisfaction of the Library, evidence of proper workman's compensation and liability insurance, coverage which shall be in an amount of at least $1,000,000.00 per occurrence, for all Vendor staff and representatives involved in the installation of the computer equipment and software.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Non-Waiver of Agreement Rights.

It is the option of any party to the Agreement to grant extensions or provide flexibilities to the other party in meeting scheduled tasks or responsibilities defined in the Agreement. Under no circumstances, however, shall any parties to the Agreement forfeit or cancel any right presented in the Agreement by delaying or failing to exercise the right or by not immediately and promptly notifying the other party in the event of a default.

In the event that a party to the Agreement waives a right, this does not indicate a waiver of the ability of the party to, at a subsequent time, enforce the right. The payment of funds to the Vendor by the Library should in no way be interpreted as acceptance of the system or the waiver of performance requirements.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Non-Collusion Covenant.

The Vendor hereby represents and agrees that it has in no way entered into any contingent fee arrangement with any firm or person concerning the obtaining of this Agreement with the Library. In addition, the Vendor agrees that a duly authorized Vendor representative will sign a non-collusion affidavit, in a form acceptable to the Library, that the Vendor firm has received from the Library no incentive or special payments, or considerations not related to the provision of automation systems and services described in this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Patents, Copyrights, and Proprietary Rights Indemnification.

The Vendor, at its own expense, shall completely and entirely defend the Library from any claim or suit brought against the Library arising from claims of violation of United States patents or copyrights resulting from the Vendor or Library use of any equipment, software, documentation, and/or data developed in connection with the services and products described in this Agreement. The Library will provide the Vendor with a written notice of any such claim or suit. The Library will also assist the Vendor, in all reasonable ways, in the preparation of information helpful to the Vendor in defending the Library against this suit. In the event that the Library is required to pay monies, in defending such claims, resulting from the Vendor being uncooperative or unsuccessful in representing the library's interest, or in the event that the Library is ordered to pay damages as a result of a judgement arising out of an infringement of patents and/or copyrights, Vendor agrees to fully reimburse the Library for all monies expended in connection with these matters. Library retains the right to offset against any amounts owed Vendor any such monies expended by the Library in defending itself against such claims.

Should a court order be issued against the Library restricting the Library's use of any product of a claim, and should the Vendor determine not to further appeal the claim issue, at the Library's sole option the Vendor shall provide, at the Vendor's sole expense, the following:

(a) Purchase for the Library the rights to continue using the contested product(s), or

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

(b) Provide substitute products to the Library which are, in the Library's sole opinion, of equal or greater quality, or

(c) Refund all monies paid to the Vendor for the product(s) subject to the court action. The Vendor shall also pay to the Library all reasonable related losses related to the product(s) and for all reasonable expenses related to the installation and conversion to the new product(s).

Nondiscrimination by Vendors or Agents of Vendor.

Neither the Vendor nor anyone with whom the Vendor shall contract shall discriminate against any person employed or applying for employment concerning the performance of the Vendor responsibilities under this Agreement. This discrimination prohibition shall apply to all matters of initial employment, tenure and terms of employment, or otherwise with respect to any matter directly or indirectly relating to employment concerning race, color, sex, religion, age, national origin, or ancestry. A breach of this covenant may be regarded as a default by the Vendor of this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Escrow of Library System Software.

The Vendor agrees to place in escrow, for the use, benefit, and protection of the Library, all software and changes thereon, and the source code of all software necessary to operate and keep current the system described by this Agreement. In the event that the Vendor withdraws support and maintenance of the software licensed under this Agreement, that the Vendor will be responsible to deliver, at least forty-five (45) days prior to the expiration of maintenance and support, all source code in escrow and any other software not yet posted by the Vendor to the escrow holdings. Withdrawal of the support and maintenance of the library's software system shall be construed liberally and, at a minimum, shall be defined as the Vendor ceasing operations, voluntarily or involuntarily, or dropping the system product lines described by this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Ownership of Data and Index Files.

All parties to the Agreement acknowledge that the Library shall maintain ownership and control of all data files and the related indexes and pointers to those data files.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Subcontractors.

Vendors may use subcontractors in connection with the work performed under this Agreement. When using subcontractors, however, the Vendor must obtain written prior approval from the Library for activities or duties to take place at the Library site or with Library data or indexes. In using subcontractors, the Vendor agrees to be responsible for all their acts and omissions to the same extent as if the subcontractors were employees of the Vendor.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Effect of Regulation.

Should any local, state, or national regulatory authority having jurisdiction over the Library enter a valid and enforceable order upon the Library which has the effect of changing or superceding any term or condition of this Agreement, such order shall be complied with, but only so long as such order remains in effect and only to the extent actually necessary under the law. In such event, this Agreement shall remain in effect, unless the effect of the order is to deprive the Library of a material part of its Agreement with the Vendor. In the event this order results in depriving the Library of materials or raising their costs beyond that defined in this Agreement, the Library shall have the right to rescind all or part of this Agreement (if such a rescission is practical) or to end the Agreement term upon thirty (30) days written prior notice to the Vendor. Should the Agreement be terminated under such circumstances, the Library shall be absolved of all penalties and financial assessments related to cancellation of the Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Assignments.

The Library and the Vendor each binds themselves, their partners, successors, and other legal representatives to all covenants, agreements, and obligations contained in this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Vendor as Independent Contractor.

It is expressly agreed that the Vendor is not an agent of the Library, but an independent contractor. The Vendor shall not pledge or attempt to pledge the credit of the Library or in any other way attempt to bind the Library.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Insurance.

The Vendor must have adequate insurance, for damage or loss, for all equipment and other valuables, until such time as the Library receives good and clear title. In defining insurance coverage, the Vendor shall secure full replacement value for the system -- without the requirement that the Library be responsible for any payments or deductibles. In the event that it is necessary to make a claim under this policy, any funds received by the Vendor shall be used to secure replacement equipment for the Library.

The Vendor agrees to hold harmless and defend the Library and its agents, officials and employees from any liability, claim or injury, related to or caused by fault or negligence of Vendor employees or subcontractors. In order to demonstrate this responsibility, the Vendor shall furnish the Library with evidence of valid comprehensive general liability insurance coverage in the amount of $ 1,000,000 for each occurrence for personal injury [including death or dismemberment] and property damage related to or resulting from shipping, installation, operation or removal of the proposed automated library system. The insurance policy shall make clear this coverage of the Library installation. The insurance policy shall be initiated at least 10 days prior to the installation of the system and maintained until final acceptance of the system by the library according to the prescribed procedures. The Vendor shall furnish to the Library a copy of the insurance policy and all subsequent changes or updates. No changes to the policy shall be made without providing written notice to the Library at least 10 days prior to the change effective date.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Expressed Warranty of Merchantability.

The Vendor warrants that the computer products, both hardware and software, are merchantable. THE IMPLIED WARRANTY OF MERCHANTABILITY IS HEREBY EXPRESSLY EXCLUDED.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Expressed Warranty of Fitness for a Particular Purpose.

The Library has presented detailed descriptions of the particular purpose for which the automated system is intended. The Library has provided detailed quantitative descriptions and criteria of how the system can be defined to accomplish or fail the Library's particular purpose. The Library has also defined the exact procedures and techniques to be employed in testing whether the proposed system has achieved the defined performance of this particular purpose. Given this advanced preparation concerning and documentation about the Library's particular purpose, the Vendor at the time this Agreement is in force has (1) reason and opportunity to know the particular purpose for which automated system products are required and (2) that the Library is relying on the Vendors experience and knowledge of these products to provide those which are most suitable and appropriate. Therefore, the vendor warrants that the system is fit for the expressed purposes for which it is intended as described in this document and its attachments.

THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXPRESSLY EXCLUDED.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Computer Hardware Expansion Responsibility.

The Library has taken great care in projecting the transaction loads, terminal configurations and data storage loads anticipated for the system during the initial 60-months of operation. It is the responsibility of the vendor to identify all hardware necessary to accomplish the stated goals of the library during 60-months, even if such hardware is not to be purchased and installed until later periods of the implementation life cycle. Should the computer hardware supplied or identified (for later purchase) by the Vendor require any undocumented upgrade, enhancement, or extension solely to meet the minimum levels of service defined for the initial 60-months, whether due to changes in software or inadequate initial planning, the Vendor shall provide the additional equipment [whether added, modified, or exchanged] to the Library at no charge. The Vendor shall also include all costs related to the shipping, insurance, installation and other related costs necessary to bring the equipment into operation. All maintenance costs associated with this additional equipment shall be paid by the Vendor until the 60-month initial operation period has passed. At this time the Library will assume the responsibility for payment of equipment maintenance.

The equipment provided to the Library under these circumstances shall become the property of the Library and the Vendor shall surrender title immediately after installation and testing. If installation of the addition or exchange equipment requires that the system be down and unavailable for normal operation, this time period shall be classified as 'unscheduled downtime' and will be used by the Library as part of the calculation necessary to determine system availability.

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Software Warranty.

The Vendor warrants that the software provided under this Agreement meets each of the specific requirements described in the Agreement. Should, after the date of formal acceptance of the system by the Library, errors be discovered, the Vendor warrants that the defects shall be corrected, without charge to the Library, for a period of ninety-days (90 calendar days). This correction may take the form of software additions, modifications, deletions or the provision of substitute software which meets the system functions as specified in this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Unrequested Software Enhancements or Additions.

Should the Vendor expand software functional or performance capabilities beyond those required as part of this Agreement, it is the option of the Library to accept or reject the installation and use of the software changes. Should the Library elect to install and use the added software functions or capabilities, the library shall be responsible for the costs associated with the purchase, installation and maintenance of the computer hardware necessary to operate same. If the Library does not elect to install and use the software functions or capabilities, then such enhancements or improvements will not be required and the Vendor will continue to provide hardware and software maintenance as prescribed in this Agreement.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Hardware Warranty.

The Vendor warrants that all equipment provided under this Agreement, whether installed initially or under subsequent purchase orders, shall be: newly manufactured equipment or assembled from newly manufactured parts; approved by Underwriter's Laboratories; and, will be free from detects in workmanship or material for a period of ninety-days (90 calendar days) from the date of final system acceptance. During this 90-day warranty period, the Vendor shall furnish all replacement new parts, repaired parts, service labor and other repair costs at no cost to the library. At the conclusion of the warranty period, the Library shall continue to secure Vendor support of equipment under a separate maintenance agreement.

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Final Acceptance of the System.

The automated library system proposed shall be defined to be finally accepted by the Library after the installation of the system, the load of the library databases and the successful completion of the following performance examinations:

(1) system hardware examination;

(2) database load performance examination;

(3) system functional competence examination;

(4) system storage capacity examination;

(5) system full load response time and processing capacity examination; and,

(6) system availability examination.

Procedures for the administration and criteria for successful completion of these examinations are found in Part _____ of the Request For Proposals document.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Arbitration.

In those situations where disagreements or disputes cannot be successfully resolved between the parties of this Agreement, the Library and the Vendor agree to the use of binding arbitration to settle the dispute. The parties of this Agreement agree to select and employ a professional arbitrator and conduct the conflict resolution process according to the rules and procedures of the American Arbitration Association. Both parties to this Agreement agree to equally share the professional fees and related expenses of the arbitrator and to abide by the directives resulting from the arbitration process.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Payment.

Payment for the System shall be according to the following schedule:

1.	Upon delivery and installation	0 %
2.	Successful completion of the Hardware Quality Examination	35 %
3.	Successful completion of the Database Load Examination	10 %
4.	Successful completion of the Functional Examination	15 %
5.	Successful completion of the Reliability Examination	20 %
6.	Successful completion of the Full Load Response Time Examination	20 %

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Software License.

Subject to the terms and conditions of this Agreement, the vendor grants to Library a non-transferable, non-exclusive and royalty-free license [the "License"] to use the Software. Library acknowledges that by virtue of this license, Library acquires only the right to use the Software and does not acquire any rights of ownership in the Software, which rights shall remain with the vendor.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Training.

Vendor shall provide, without additional charge, group training sessions on the operation and use of the System for Library's personnel. Such sessions are to be conducted at the Library either prior to or after installation of the Library's System at times to be agreed upon by the Library and Vendor.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Title.

Title to all equipment shall pass to Library upon successful completion of the Hardware Quality Examination. The Library hereby grants to the vendor a security interest in the Equipment and the proceeds thereof to secure the performance of the Library's obligation to pay all costs for the Equipment.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Installation

Vendor shall be responsible for the installation of the Equipment and shall connect same to the power sources which are installed by Library. Installation shall be performed between _____ and _____ local time, and Library shall make all the necessary and reasonable arrangements to allow Vendor personnel sufficient work space and access to the installation location(s).

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Limitation of Liability.

EXCEPT FOR PERSONAL INJURY OR PROPERTY DAMAGE CAUSED BY THE NEGLIGENCE OR WILLFUL MISCONDUCT OF A PARTY'S EMPLOYEES WHILE LOCATED AT THE SITE OF THE OTHER PARTY, EITHER PARTY'S LIABILITY FOR DAMAGES UNDER THIS AGREEMENT, WHETHER FOR BREACH OF WARRANTY OR CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE SYSTEM. IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WHETHER OR NOT A PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF ANY SUCH DAMAGES.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Publicity.

Vendor agrees to submit to the Library all press releases, advertising, sales promotions, articles, or any other information, publicity, or marketing materials or matters related to any product furnished by Vendor to Library wherein the Library's name is mentioned, excluding Vendor's customer list. Vendor shall not publish or permit to be published any such materials without the prior written consent of Library, which shall not be unreasonably withheld or delayed.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

1 ***UCC Applicability.***

2 Except to the extent that the provisions of this Agreement are clearly inconsistent

3 therewith, this Agreement shall be governed by any applicable provisions of the

4 Uniform Commercial Code.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Compliance with all Laws -- Partial Invalidity.

(a) Compliance. Each party agrees that it will perform its obligations herein in accordance with all applicable laws, rules and regulations now or hereinafter in effect. Neither party shall have to take any action which would violate the law.

(b) Partial Invalidity. If any term or provision of this Agreement shall be found to be illegal or unenforceable then, notwithstanding, this Agreement shall remain in full force and effect and such term or provision shall be deemed stricken.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

1 ***Headings not Controlling.***

2 Headings and titles used in this Agreement are for reference purposes only and shall

3 not be deemed a part of this Agreement.

SCHEDULES.

1. Equipment Listing
2. Software Listing
3. Services and Other Costs Listing
4. Price List and Maintenance Schedule
5. Implementation plan and Task Responsibility Checklist
6. Failure to Perform Remedies
7. Examinations
8. Training Plan
9. Site Preparation Requirements
10. Escrow Agreement
11. Insurance Documents
12. Communications and Correspondence

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TEST 1: System Hardware Quality Examination.

After installation of the computer hardware at the library site [by vendor personnel], a hardware quality examination will be performed. This test must be conducted immediately upon the completion of the computer hardware installation. Designated library personnel must be present for the test. The hardware shall be continually tested for the duration of hours required by the original manufacturer for diagnostic testing, or for a minimum of 72 hours, whichever is greater. Upon completion of this test, the vendor has seven (7) calendar days to send written notice (certified mail, return receipt) that in the opinion of the vendor, the test has been successfully completed. The library will be the sole judge of when this examination has been successfully performed.

This examination will include a minimum of the following tests:

(a) Central processing unit(s) diagnostic test.

(b) Memory unit(s) diagnostic test.

(c) Disk storage/controller unit(s) diagnostic test. [Including the writing of a disk file, the reading of a disk file, and the erasure of a disk file.]

(d) Magnetic tape drive unit(s) diagnostic test. [Including the writing of a file to tape, the reading of a file from tape, and the erasure of a tape file.]

(e) Alphanumeric terminal unit(s) diagnostic test.

(f) Line printer unit(s) diagnostic test. [Including a printer spray test.]

(g) Slave printer unit(s) diagnostic test. [Including a printer spray test.]

(h) Telecommunications unit(s) diagnostic test.

(i) Power loss/failure test.

TEST 2: Database Load Performance Examination.

Once the system has been installed and the computer hardware tests successfully passed, the vendor should install all operating system and applications software. At this point in the system installation, the database load tests will be applied. There are two criteria which the system must accomplish to pass this examination:

(a) The system must be able to successfully load the library's bibliographic database from magnetic tape.

(b) The system must be able to successfully transfer [OCLC local terminal to system interface] records from the OCLC bibliographic utility system. This transfer includes an evaluation of both the (1) completeness of MARC field data transfer and (2) completeness of index creation.

Upon completion of this test, the vendor has seven (7) calendar days to send written notice (certified mail, return receipt) that in the opinion of the vendor, the test has been successfully completed. Once the system has successfully received and loaded records from both sources, the staff will perform a review of the transferred records to determine the error rate of the transfers. Should errors be found, the software and interface will be reviewed [and corrected] by the vendor and the test re-applied. This process will continue until no errors or transfer/load errors are detected. The library will be the sole judge of when this examination has been successfully performed.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

TEST 3: Functional Competence Examination.

The system functional competence examination is an ongoing test to determine if the minimal functional capabilities of the system are present and available for use. This examination will remain in effect for the duration of the contract and remain the mechanism to establish and document acceptable and unacceptable system functional performance.

Upon the completion of the bibliographic database load examination and prior to the application of this functional competence examination, the library will complete the load of all bibliographic records. The library will also load patron and library materials item data, either in its entirety or enough [in the library's judgment] to serve as a valid test database. Once adequate data is loaded into the system and properly indexed, as described in the functional requirements, designated library staff will perform the functional competence examination. Under any circumstances, this test will be commenced within sixty (60) days of the successful completion of the database load performance examination.

After receiving the vendor notice of successful completion of the database load examination and at least ten (10) calendar days prior to beginning the functional competence examination, the library will provide the vendor with written notice (certified mail, return receipt) of the exact date and time the functional competence tests will begin. At this time, library staff will test each of the required functions to determine if they perform according to the proper procedures and if they result in accurate processing results. This functional test shall include all online functions and

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

report generation capabilities specified by both the Request for Proposals documents and the vendor response to the Request for Proposals. All functional tests will be performed according to the exact procedures documented in the written vendor operations and/or procedures manuals. Should vendor representatives be present, no verbal or physical prompting shall be allowed. Functions which are not possible to perform according to the written documentation [even if possible with special training not presented in system documentation], shall fail the functional competence examination.

It is required that all (100%) of the functional requirements be successfully passed. The library will be the sole judge of when this examination has been successfully performed.

It is the responsibility of the vendor to test all new releases, software 'fixes', and software upgrades prior to installation at the library site. At a later date, should a loss of functional capability be experienced by the library, this test shall be re-administered and the same success criteria applied.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

TEST 4: Storage Capacity Examination.

Clearly defined in the proposal packet are the number of records [by record type] and the indexing values required for operation of the system. It is the intent of the library to clearly identify, at time of contracting, the number of records required to be stored by the proposed system configuration. The system storage capacity examination will be an ongoing quality examination requiring that the vendor provide a minimum storage capacity [while maintaining all other system performance criteria] based on the projected number of records for the initial five (5) years of the system.

The library does not have the expertise nor knowledge of proprietary information sufficient to allow for the prediction of storage capacity requirements. It is required, therefore, that the vendor contractually guarantee that the levels of data specified (number of records with the defined indexed values) can be efficiently stored on the system. Should the library not have sufficient storage capacity, it shall be the responsibility of the vendor to provide, at their initial and ongoing expense, data storage devices sufficient to accomplish this. Recognizing this responsibility, vendors should adequately establish **margins of safety** in proposing disk storage.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

TEST 5: Full Load Response Time Examination.

The most difficult and controversial examination is the full load response time test (also called 'throughput test'). As with the functional competence test, the system full load response time and processing capacity examination is an ongoing test to determine if sufficient hardware and software resources have been provided by the vendor to achieve the minimum levels of response time and processing capacity performance. This examination will remain in effect for the duration of the contract and remain the mechanism to establish and document acceptable and unacceptable system response time performance.

This test is designed to evaluate two qualities:

(1) The speed of the system response to commands initiated by a specific user on a specific subsystem.

(2) The ability of the system to successfully process the large mix of different transactions while also maintaining minimum response time speeds.

While the exact procedures to be employed will be negotiated prior to signing the contract, the following criteria will be required:

(a) This test cannot be applied until such time as a minimum of 85% of the bibliographic, patron, and item databases have been loaded into and indexed by the system.

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(b) While the database will remain fixed [at the size level indicated in statement (a)], the test will be applied for the anticipated transaction demands of year 1, year 3, and year 5.

(c) The library will prepare detailed transaction logs to be used by operators in performing the test. These logs will contain the exact transactions to be performed by each operator. These logs will be composed of a mix of transactions which the library feels will be comparable to the peak performance demands placed on this system for the time period indicated. Included in this mix will be functions pertaining to circulation, online public access catalog, technical services functions, etc. Vendors will be invited to participate in the creation of these transaction logs and lend assistance in combining the proper combination of transactions for each functional area (such as the mix of charge, discharge, renewal, hold, new patron, etc. for circulation). While vendors will be invited to make recommendations on the transaction mix, the library will have sole responsibility for the final transaction log mixtures. The probable mix has been listed at the conclusion of this test description.

(d) There will be three (3) separate applications of the test, each with the same transaction logs, but with different operators assigned to those logs. This will minimize operator error or inefficiency factors. Each test period will last for 30 minutes.

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(e) There will be three (3) staffing levels necessary to perform the test. These are:

Operators: Each designated workstation will have a fully trained operator. These individuals will perform the actual tests using the system terminals, or other devices.

Monitors: Selected workstations will have monitor personnel. These individuals will use a stopwatch to track and record response times for certain transactions.

Jurors: Library managers, consultants, and vendor representatives will serve as system jurors. These individuals will be present to supervise the proper application of test procedures and to calculate the final results of the test(s).

(f) There will be two (2) measures applied during each of the three (3) test periods.

MEASURE 1: Using a stopwatch, the monitor will record the response time of each transaction. [At the designated workstation only.]

MEASURE 2: Using the transaction log, the operator will track and record the total number of transactions which can be accomplished within the defined time period.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

(g) Upon request, all transaction logs will be made available to the vendor prior to the application of the test.

(h) The final results will be calculated by the library staff with assistance from the consultant. Vendor representatives will be allowed to verify the test findings.

(i) At this time, the probable full load performance mix [terminal functions and transaction types] will be as shown below

1. _____ (x) terminals performing circulation transactions.

1.1 Charge function. Each of these _____ (x) terminals will be scheduled to charge out an average of 5 library items per minute. Each patron will be borrowing either 2 or 3 items. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

1.2 Renewal function. Transaction logs will be designed to initiate and include one renewal transaction for each 5th patron charging out materials. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

1.3 Patron card renewal function. Transaction logs will be designed to initiate a patron card renewal procedure for every 25th patron which charges out

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

materials. The system must have an upper-limit average response time of five (5) seconds or less for this type of transaction.

1.4 Fine posting transactions. Transaction logs will be designed to initiate a fine posting every 15th charge transaction. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

1.5 Hold transactions. Transaction logs will be designed to initiate a hold request every 40th charge transaction. The system must have an upper-limit average response time of five (5) seconds or less for this type of transaction.

1.6 Charge block function. Transaction logs will be designed to initiate a block of the charge function every 50th charge transaction. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

2. _____ (x) terminals performing circulation discharge transactions.

2.1 Discharge function. This terminal will be scheduled to discharge an average of 5 library materials per minute. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

2.2 Overdue posting. Transaction logs will be designed to where every 25th discharge will require the posting of an overdue fine to the patron record. The

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

2.3 Fine payment. Transaction logs will be designed where every 30th discharge will post a fine payment to the appropriate records. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

3. _____ (x) terminals performing patron inquiry and registration transactions.

3.1 Patron registration function. Transaction logs will be designed where this terminal will perform a specified number of patron registrations. The system must have an upper-limit average response time of five (5) seconds or less for this type of transaction.

3.2 Patron inquiry function. Transaction logs will be designed where this terminal will perform a specified number of patron record inquiries which will display patron information, library materials charged out, and fines paid/pending. The system must have an upper-limit average response time of three (3) seconds or less for this type of transaction.

4. _____ (x) terminals performing technical services and database maintenance functions.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

4.1 Bibliographic database inquiry function. Transaction logs will be designed where this terminal is performing an average of one (1) bibliographic record inquiry per minute. The system must have an upper-limit average response time of five (5) seconds or less for this type of transaction.

4.2 Bibliographic database update function. Transaction logs will be designed where this terminal updates every 5th bibliographic record reviewed. The system must have an upper-limit average response time of ten (10) seconds or less for this type of transaction.

4.3 Bibliographic database add function. Transaction logs will be designed where this terminal adds a new bibliographic record every 20th bibliographic record viewed. The system must have an upper-limit average response time of fifteen (15) seconds or less for this type of transaction.

4.4 Item record database add function. Transaction logs will be designed where this terminal adds an item record to every 10th bibliographic database record viewed. The system must have an upper-limit average response time of nine (9) seconds or less for this type of transaction.

5. _____ (x) terminals performing online public access catalog transactions.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

5.1 Title and author inquiry function. Transaction logs will be designed where _____ (x) terminals is performing an equal mix of OPAC title inquiries (50%) and OPAC author inquiries (50%). Terminal must be able to perform an average of four (4) inquiries per minute. The system must have an upper-limit average response time of five (5) seconds or less for this type of transaction.

5.2 Subject inquiry function. Transaction logs will be designed where _____ (x) terminals are performing single logical search argument (as contrasted with boolean search arguments) subject inquiries. These terminals must be able to perform an average of four (4) inquiries per minute. The system must have an upper-limit average response time of nine (9) seconds or less for this type of transaction.

5.3 Boolean inquiry function. Transaction logs will be designed where _____ (x) terminals are performing boolean inquiries, composed of any two of all possible indexed data elements. This terminal must be able to perform an average of three (3) inquiries per minute. The system must have an upper-limit average response time of fifteen (15) seconds or less for this type of transaction.

6. _____ (x) terminals performing a broad mixture of all types of transactions.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

TEST 6: System Reliability [Availability] Examination.

The system availability examination is an ongoing test to determine if the (a) entire system, (b) each hardware component, and/or (c) each software component is available for library use [within the other defined performance criteria] according to the negotiated 'uptime' schedule. This examination will be applied [and re-applied]:

(1) To determine the initial acceptability of computer hardware and software resources provided to the library.

(2) To be the ongoing measure of acceptable levels of uptime/downtime for computer equipment and software. Based on the contractual thresholds established, this test will be employed to determine when excessive downtime will place the vendor in contract default.

While the exact procedures to be employed will be negotiated prior to signing the contract, the following criteria will be required:

(a) Upon receipt by the library from the vendor of notice of the successful completion of the hardware quality examination, the library shall initiate the system availability test. Once initiated, this test shall take place for sixty (60) calendar days, excluding holidays. The duration of hours during which the test shall apply for each day will be the same as the library hours of operation.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

(b) The availability test may be overlapped with other performance testing procedures.

(c) In order to successfully pass this test, the system must be available for 99% of the available hours of library operation during the test period.

(d) All downtime shall be measured in increments of 6 minutes, rounded to the nearest (up or down) increment. In calculating downtime, each occurrence shall be measured, calculated separately, and logged into the operations downtime transaction log. At the conclusion of the 60-day test period, the downtime value resulting from each occurrence will be combined to arrive at the total amount of downtime. The formula for calculating each occurrence of downtime is as follows:

(d) = downtime coefficient value
(m) = number of minutes of downtime
(t) = total downtime [for that occurrence]

FORMULA: (t) = (d) x (m)

(e) The downtime coefficient value shall be assigned according to the following table of hardware/software losses.

Hardware Major Outage: Coefficient Value = 1.0 [each device]

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

Central processing unit[1]

Disk drive(s)/controller[1]

Operations console

Central site data communications equipment

Main memory

[1] Classify as minor outage if a redundant/mirrored system.

Hardware Minor Outage: Coefficient Value = 0.25 [each device]

Terminals

Optical scanning device

OCLC interface [if hardware]

Line printer

Tape drive

Slave printer

Portable optical reader/terminal

Modems/MUX

Any other vendor supplied equipment

Software Major Outage: Coefficient Value = 1.0 [per function]

Charge

Discharge

Renewal

Hold

Fine payment

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

OPAC title inquiry

OPAC author inquiry

OPAC subject inquiry

Bibliographic file inquiry

Patron file inquiry

Item file inquiry

Software Minor Outage: Coefficient Value = 0.5 [per function]

Bibliographic file add/transfer/update/delete

Patron file add/update/delete

Item file add/update/delete

Authority file add/update/delete

OPAC keyword inquiry

OPAC boolean inquiry

Acquisitions functions

Serials functions

(f) All software functions not specifically identified above will not be included in the downtime calculation until they have been unavailable for a period of 16 scheduled business hours. At that time, they will automatically carry of coefficient value of 0.5.

(g) The library has primary responsibility for maintaining the downtime log. The vendor, however, will be encouraged to maintain a separate downtime log.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]

(h) Downtime is defined as the amount of time from the minute the vendor is notified of the occurrence (or where a good faith effort is made to notify the vendor) and the moment that the outage is successfully resolved. This excludes holidays and other times when the library is officially closed.

(i) The vendor must pass the system availability examination within 180 days after the installation of the system.

[SPECIAL NOTE: Language intended only as example; may not apply to many situations.]